

697.9

QUAKER CITY  
Heat, Light & Ventilating Co.

MANUFACTURERS OF

Improved Water and Air

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COMBINATION & FURNACES

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AND

Warm Air Furnaces,

FOR WARMING AND VENTILATING

Dwellings, School Houses, Churches, Banks, Stores, Etc.

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PATENTED by R. J. YOUNG,

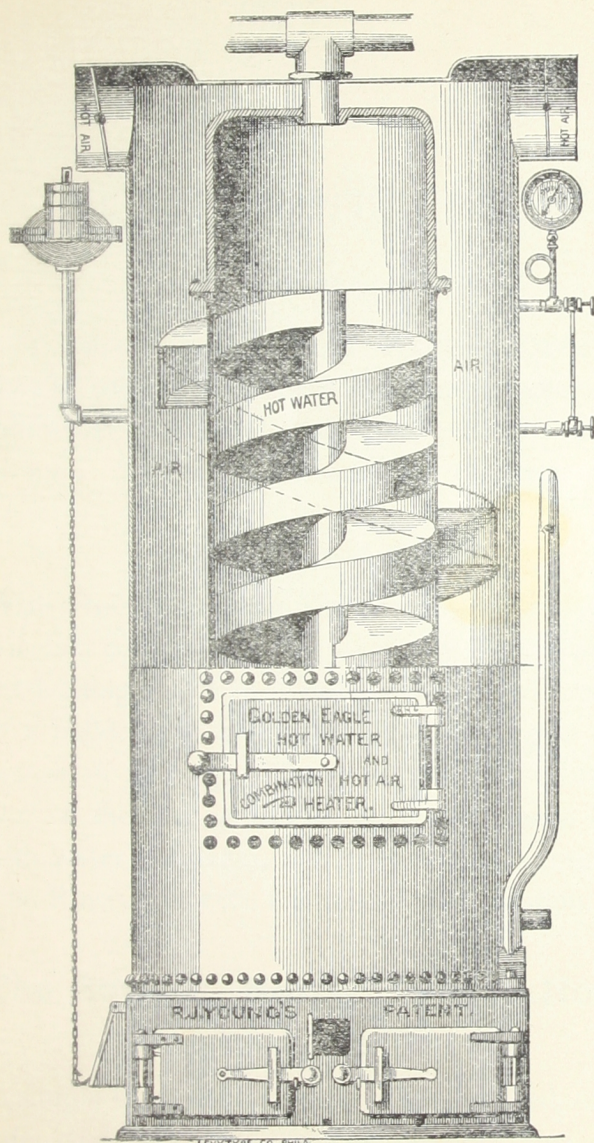
No. ~~10~~ South ~~5th~~ Street,  
*14 N 4th*  
PHILADELPHIA, PA.

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Quinn, Steam Power Printer, 3d and Market Sts., Phila.











# SOMETHING NEW.



A REVOLUTION IN HOUSE HEATING APPLIANCES, that is worthy of the consideration of every body interested in the health and comfort of their Homes. Do not fail to examine this new device.

## HEATING OUR HOMES

With Hot Water and VENTILATING with pure Hot Air, is a combination comparatively a new feature in the heating business. The Health of the occupants of a building to be heated depends largely on the system of heating. The great and important question of the day is, can we have our homes heated with water or steam, and have proper ventilation? The ROYAL FURNACE has solved this question.

## The Royal A. Hot Water and Hot Air Combination Furnace

Is simple in its construction, easily handled, entirely safe, and will save 50 per cent. of fuel. It is

presented to the public as meeting every requirement as a Heater and Ventilator. In economy and simplicity it has no equal. It is constructed on Practical, Scientific Principles. The equipment is perfect; the circulation for water, and the products of combustion cannot be excelled.

### THE SIMPLICITY

Of the whole mechanism and working of the Royal A. Furnace can be comprehended by the most casual observer.

### CONSTRUCTION.

"A" shows the Spiral Receptacle, which forms a flue of itself, and its construction with the Dome; also the Spiral for the return, and feeder connection with the Water Jacket surrounding the Furnace. This provision for supplying cold water, which becomes heated before it enters the Generator is a most valuable one, as it prevents what otherwise must be a sudden, unequal contraction of the sensitive parts of the Heater.

"B" is the Fire Pot, formed by the water jacket, the products of combustion passing upwards, following the course of the spiral, passing directly under parts to be heated, hence the great advantage of the Spiral



"C" is a Spiral Return Flue, carrying the products of combustion back through the Air Chamber, hence hot air; thus the entire inner and outer surface are surrounded by the products of combustion from the Generator in fire pot, to the exit in Chimney, absorbing all of their effective force before escaping, and producing hot water and air with a rapidity and economy otherwise unattainable.

**The Royal A. Furnace** claims to be the best Generator, simple in construction, not liable to get out of order, and will generate more hot water or steam, and hot air, with less fuel, than any other furnace made. It is an ingenious, simple mechanical device, diminishing labor, and producing results heretofore unknown.

#### THE ROYAL A. FURNACE

Is not confined strictly to combination of air and water heaters, but is adapted to a warm air furnace as well, just as circumstances present themselves; hence the great convenience of using the Royal Furnace.

The motto of the Royal Furnace is effectiveness, economy, simplicity, durability and ease of management.

**OUR SYSTEMS OF HEATING AND VENTILATING**  
Are based on well-recognized principles. We en-

deavor to conform to the requirements of natural law, and we believe that an impartial examination of the peculiar features embodied in our systems will convince any reasonable mind of the economy, correctness and superiority of our methods of heating, in connection with well-established principles of ventilation. We recognize the sanitary importance, in fact the absolute necessity of adjusting our plants in such a manner as to supply a circulation of fresh, warm air,—*pure and free from dust or Gas.*

The system of heating used in connection with our *Royal Combination Heater* employs the same means of warming and distributing air from the outside, and in addition provides water radiation, which is supplied from a steel spiral suspended over the fire inside of the combustion chamber of the Heater.

### **Royal Blue Steel Spiral Furnace,**

A Heating apparatus that meets every sanitary and scientific requirement. It will do everything in the way of supplying pure warm air, free from dust or gas, while at the same time it does not require any more attention than an ordinary stove.

Where the ROYAL B. FURNACE is used, the building is ventilated, even where there was no provision



made for ventilation when the house was constructed. The air retains its purity after being heated. We invite attention to the construction of the ROYAL B. FURNACE.

It will be noticed that it has 100 per cent. more radiating surface than is usually found in portable heaters, and that this result is attained without any complication. The products go boiling up through the steel spiral, thence returning through an outer spiral, so that all gases and smoke descend, thence passing off into chimney. This feature in the ROYAL B. FURNACE secures a combustion as near perfection as it is possible to attain in any coal-burning furnace—economizing fuel and preventing the excessive formation of gas. In the ROYAL B. FURNACE all gases are burned—utilized as fuel for the production of heat.

In the construction of the ROYAL B. FURNACE, we have borne in mind that many other furnaces have been condemned because of the trouble and cost of repairing them every season. The ROYAL B. FURNACE will stand the severest test without damage. The fire pot is made of cast iron; it is wider at the bottom than at the top, which makes it more durable, causes it to clear easily, and prevents the accumulation of dead matter along the sides. The spiral receptacle is connected with the fire pot, and is in-

destructible, being cast in one hollow piece, thus avoiding joints.

The ROYAL B. is the most powerful Furnace in the market relative to diameter of casing. This result is due to its immense radiating surface, perfect combustion of fuel, and to the fact that it has a large grate surface.

To prevent the radiation of heat in the cellar, the ROYAL B. FURNACE is double cased.

This Company takes pleasure in presenting to the public the following system of house warming, hoping it will serve a useful purpose in preventing cheap, inferior, unhealthy Heating Furnaces from being used, and avoid the great annoyance to those using them.

We hope to convince you of the necessity of using these Furnaces, for the health and comfort of your families.

Most of the Hot Air Furnaces of this day are made of the most inferior iron, and so cheaply constructed that the gases are continually leaking into the Air Chamber. Is it any wonder, when you go home to your family in the evening to find them cranky or sickly, and the sick growing worse? Is it any wonder when you and your family arise out



of bed in the morning you all feel more weary than when you retired to rest? The cause of all this trouble is because you are continually inhaling that poisonous gas.

The remedy for this is in using the ROYAL B. HOT AIR FURNACE, which is constructed of cast iron. There is no chance for leakage. There are no joints to plaster up with cement. It will warm your house with pure, moist air, free from gas, smoke or dust, and at a saving of 33 per cent. of fuel. We will guarantee every Royal B. Furnace to do as represented.

The spiral receptacle fills a space in the cylinder that has heretofore been a conductor to carry the products of combustion out of the fire pot to the flue, thence to the open air; the consumer getting the benefit of 20 per centum only of the fuel consumed—a loss of four-fifths. This statement is no stranger than true. We claim that the ROYAL B. FURNACE will give fifty per cent. more heat from the same amount of fuel consumed than any other Furnace now in use.

Be sure to see our Furnaces before purchasing elsewhere.

If your Furnace needs repairing, or does not give

24 N 4th St

you sufficient heat, we will be pleased to put in our new device, which produces more heat with less fuel, and will be perfectly gas proof.

The ROYAL A. HOT WATER FURNACE is the best House Warming Furnace. It cannot be surpassed in supplying Hot Water for Laundries, Hotels, and other places where much Hot Water is used. Call and see, and you will be convinced. Our Furnace is simple in its construction, and not liable to get out of order.

Our Hot Water Furnace weighs 450 pounds. The usual weight for a Hot Water Furnace is from 1000 to 2500 pounds. Note the difference in weight.

Our Hot Air Furnace weighs only 250 pounds.

These Furnaces have taken years of study by the Patentee to bring them to perfection.

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Price List and Directions for Setting the Furnace  
sent on application to

**R. J. YOUNG, PATENTEE AND MANUFACTURER,**

~~19 S. FIFTH ST., PHILAD'A.~~

24 N 4th St

CORRESPONDENCE SOLICITED.

Estimates given. Orders Promptly attended to, and all  
work guaranteed.